CLAIMS

What is claimed is:

1. A method for stateful toggling of checkbox status,

the method implemented as a software program installed and operating on a computer comprising a computer processor coupled to computer memory,

the computer comprising also a computer display which itself further comprises a graphical user interface ("GUI"),

the method implemented on the GUI, the GUI operated by a user using a pointing device, the pointing device having a capability of indicating a touch on a checkbox, the pointing device having associated with it through the GUI a pointer displayed upon the GUI and responsive to physical motion of the pointing device,

the GUI having displayed upon it a set of checkboxes comprising a multiplicity of checkboxes, wherein each checkbox has a status comprising an indication whether a checkbox is selected,

the method comprising the steps of:

detecting a touch event on a first checkbox;

storing the initial status of all checkboxes in the set;

toggling the status of the first checkbox to a new status;

repeatedly, for a multiplicity of repetitions, carrying out the steps of:

detecting a drag event for a checkbox onto which a user drags the pointer;

comparing the initial status of the checkbox onto which a user drags the pointer and the new status of the first checkbox; and

if the stored initial status of a checkbox for which a drag event is detected is the same as the new status of the first checkbox, toggling the status of the checkbox for which a drag event is detected.

2. The method of claim 1 wherein, for at least a portion of the repetitions, one or more further checkboxes are positioned upon the display screen in the GUI between two of the additional checkboxes, wherein a path along which the pointer drags between the two additional checkboxes lies outside the further checkboxes, whereby the statuses of the further checkboxes remain unaffected.

3. The method of claim 1 wherein detecting a touch event comprises changing a pointer device status to 'active' while a pointer for the device is positioned on the checkbox.

4. The method of claim 1 wherein the pointing device is a mouse.

5. The method of claim 1 wherein the pointing device is a stylus pressed upon a touch sensitive pad.

6. The method of claim 1 wherein the pointing device is a finger pressed upon a touch sensitive screen.

7. The method of claim 1 wherein the first checkbox has a GUI image and toggling the status of the first checkbox includes changing the GUI image of the first checkbox to indicate a change in the status of the first checkbox.

8. A method of stateful toggling of checkbox status,

the method implemented as a software program installed and operating on a computer comprising a computer processor coupled to computer memory,

the computer comprising also a computer display which itself further comprises a graphical user interface ("GUI"),

the method implemented on the GUI, the GUI operated by a user using a mouse, the mouse comprising a mouse button, the mouse having associated with it through the GUI a mouse pointer displayed upon the GUI and responsive to physical motion of the mouse,

the GUI having displayed upon it a set of checkboxes comprising a multiplicity of checkboxes, wherein each checkbox has a status comprising an indication whether a checkbox is selected,

the method comprising the steps of:

the user positioning the mouse pointer on a first checkbox;

the user depressing the mouse button, wherein results a mouse down event;

detecting the mouse down event on the first checkbox;

storing the initial status of all checkboxes in the set;

toggling the status of the first checkbox to a new status;

the mouse, at the behest of the user, dragging the mouse pointer along a path on the display screen from the first checkbox to a second checkbox;

detecting a mouse drag event on the second checkbox;

comparing the initial status of the second checkbox and the new status of the first checkbox; and

if the stored initial status of the second checkbox is the same as the new status of the first checkbox, toggling the status of the second checkbox.

9. The method of claim 8 wherein a third checkbox is positioned upon the display screen in the GUI at a position between the first checkbox and the second checkbox, wherein the path along which the mouse pointer is dragged from the first checkbox to the second checkbox lies entirely outside the third checkbox, whereby the steps of moving the mouse pointer to the second checkbox, detecting the mouse drag event, comparing the initial status of the second checkbox and the new status of the first checkbox, and toggling the status of the second checkbox leave the third checkbox unaffected.

10. A system for stateful toggling of checkbox status,

the system implemented as a software program installed and operating on a computer comprising a computer processor coupled to computer memory,

the computer comprising also a computer display which itself further comprises a graphical user interface ("GUI"),

the system implemented on the GUI, the GUI operated by a user using a pointing device, the pointing device having a capability of indicating a touch on a checkbox, the pointing device having associated with it through the GUI a pointer displayed upon the GUI and responsive to physical motion of the pointing device,

the GUI having displayed upon it a set of checkboxes comprising a multiplicity of checkboxes, wherein each checkbox has a status comprising an indication whether a checkbox is selected,

the system comprising:

means for detecting a touch event on a first checkbox;

means for storing the initial status of all checkboxes in the set;

means for toggling the status of the first checkbox to a new status;

means for repeatedly, for a multiplicity of repetitions, carrying out the steps of:

means for detecting a drag event for a checkbox onto which a user drags the pointer;

means for comparing the initial status of the checkbox onto which a user drags the pointer and the new status of the first checkbox; and

if the stored initial status of a checkbox for which a drag event is detected is the same as the new status of the first checkbox, means for toggling the status of the checkbox for which a drag event is detected.

11. The system of claim 10 wherein, for at least a portion of the repetitions, one or more further checkboxes are positioned upon the display screen in the GUI between two of the additional checkboxes, wherein a path along which the pointer drags between the two additional checkboxes lies outside the further checkboxes, whereby the statuses of the further checkboxes remain unaffected.

12. The system of claim 10 wherein means for detecting a touch event comprises changing a pointer device status to 'active' while a pointer for the device is positioned on the checkbox.

13. The system of claim 10 wherein the pointing device is a mouse.

14. The system of claim 10 wherein the pointing device is a stylus pressed upon a touch sensitive pad.

15. The system of claim 10 wherein the pointing device is a finger pressed upon a touch sensitive screen.

16. The system of claim 10 wherein the first checkbox has a GUI image and means for toggling the status of the first checkbox includes changing the GUI image of the first checkbox to indicate a change in the status of the first checkbox.

17. A system of stateful toggling of checkbox status,

the system implemented as a software program installed and operating on a computer comprising a computer processor coupled to computer memory,

the computer comprising also a computer display which itself further comprises a graphical user interface ("GUI"),

the system implemented on the GUI, the GUI operated by a user using a mouse, the mouse comprising a mouse button, the mouse having associated with it through the GUI a mouse pointer displayed upon the GUI and responsive to physical motion of the mouse,

the GUI having displayed upon it a set of checkboxes comprising a multiplicity of checkboxes, wherein each checkbox has a status comprising an indication whether a checkbox is selected,

the system comprising:

the user positioning the mouse pointer on a first checkbox;

the user depressing the mouse button, wherein results a mouse down event;

means for detecting the mouse down event on the first checkbox;

means for storing the initial status of all checkboxes in the set;

means for toggling the status of the first checkbox to a new status;

the mouse, at the behest of the user, dragging the mouse pointer along a path on the display screen from the first checkbox to a second checkbox;

means for detecting a mouse drag event on the second checkbox;

means for comparing the initial status of the second checkbox and the new status of the first checkbox; and

if the stored initial status of the second checkbox is the same as the new status of the first checkbox, means for toggling the status of the second checkbox.

18. The system of claim 17 wherein a third checkbox is positioned upon the display screen in the GUI at a position between the first checkbox and the second checkbox, wherein the path along which the mouse pointer is dragged from the first checkbox to the second checkbox lies entirely outside the third checkbox, whereby the steps of moving the mouse pointer to the second checkbox, detecting the mouse drag event, comparing the initial status of the second checkbox and the new status of the first checkbox, and toggling the status of the second checkbox leave the third checkbox unaffected.

19. A computer program product for stateful toggling of checkbox status,

the computer program product implemented as a software program installed and operating on a computer comprising a computer processor coupled to computer memory,

the computer comprising also a computer display which itself further comprises a graphical user interface ("GUI"),

the computer program product implemented on the GUI, the GUI operated by a user using a pointing device, the pointing device having a capability of indicating a touch on a checkbox, the pointing device having associated with it through the GUI a pointer displayed upon the GUI and responsive to physical motion of the pointing device,

the GUI having displayed upon it a set of checkboxes comprising a multiplicity of checkboxes, wherein each checkbox has a status comprising an indication whether a checkbox is selected,

the computer program product comprising:

a recording medium;

means, recorded on the recording medium, for detecting a touch event on a first checkbox;

means, recorded on the recording medium, for storing the initial status of all checkboxes in the set;

means, recorded on the recording medium, for toggling the status of the first checkbox to a new status;

means, recorded on the recording medium, for repeatedly, for a multiplicity of repetitions, carrying out the steps of:

means, recorded on the recording medium, for detecting a drag event for a checkbox onto which a user drags the pointer;

means, recorded on the recording medium, for comparing the initial status of the checkbox onto which a user drags the pointer and the new status of the first checkbox; and

if the stored initial status of a checkbox for which a drag event is detected is the same as the new status of the first checkbox, means, recorded on the recording medium, for toggling the status of the checkbox for which a drag event is detected.

20. The computer program product of claim 19 wherein, for at least a portion of the repetitions, one or more further checkboxes are positioned upon the display screen in the GUI between two of the additional checkboxes, wherein a path along which the pointer drags between the two additional checkboxes lies outside the further checkboxes, whereby the statuses of the further

checkboxes remain unaffected.

21. The computer program product of claim 19 wherein means, recorded on the recording medium, for detecting a touch event comprises changing a pointer device status to 'active' while a pointer for the device is positioned on the checkbox.

22. The computer program product of claim 19 wherein the pointing device is a mouse.

23. The computer program product of claim 19 wherein the pointing device is a stylus pressed upon a touch sensitive pad.

24. The computer program product of claim 19 wherein the pointing device is a finger pressed upon a touch sensitive screen.

25. The computer program product of claim 19 wherein the first checkbox has a GUI image and means, recorded on the recording medium, for toggling the status of the first checkbox includes changing the GUI image of the first checkbox to indicate a change in the status of the first checkbox.

26. A computer program product of stateful toggling of checkbox status,

the computer program product implemented as a software program installed and operating on a computer comprising a computer processor coupled to computer memory,

the computer comprising also a computer display which itself further comprises a graphical user interface ("GUI"),

the computer program product implemented on the GUI, the GUI operated by a user using a mouse, the mouse comprising a mouse button, the mouse having associated with it through the GUI a mouse pointer displayed upon the GUI and responsive to physical motion of the mouse,

the GUI having displayed upon it a set of checkboxes comprising a multiplicity of checkboxes, wherein each checkbox has a status comprising an indication whether a checkbox is selected,

the computer program product comprising:

a recording medium;

the user positioning the mouse pointer on a first checkbox;

the user depressing the mouse button, wherein results a mouse down event;

means, recorded on the recording medium, for detecting the mouse down event on the first checkbox;

means, recorded on the recording medium, for storing the initial status of all checkboxes in the set;

means, recorded on the recording medium, for toggling the status of the first checkbox to a new status;

the mouse, at the behest of the user, dragging the mouse pointer along a path on the display screen from the first checkbox to a second checkbox;

means, recorded on the recording medium, for detecting a mouse drag event on the second checkbox;

means, recorded on the recording medium, for comparing the initial status of the second checkbox and the new status of the first checkbox; and

if the stored initial status of the second checkbox is the same as the new status of the first checkbox, means, recorded on the recording medium, for toggling the status of the second checkbox.

27. The computer program product of claim 17 wherein a third checkbox is positioned upon the display screen in the GUI at a position between the first checkbox and the second checkbox, wherein the path along which the mouse pointer is dragged from the first checkbox to the second checkbox lies entirely outside the third checkbox, whereby the steps of moving the mouse pointer to

the second checkbox, detecting the mouse drag event, comparing the initial status of the second checkbox and the new status of the first checkbox, and toggling the status of the second checkbox leave the third checkbox unaffected.